



Fig. 1: Map showing the places mentioned in the text

communication, I learnt that the bird was ringed in Mongolia at 44.25° N, 105.19° E, as a nestling on July 18, 2001 on an Elm (*Ulmus*) by Prof. Dr. Michael Stubbe from the University of Halle, Germany.

This was perhaps the first concrete evidence of migration of *Milvus migrans lineatus* from Mongolia to India.

I thank Dr. R.K. Ranjan Singh of Manipur University for locating the ringed bird and informing me. I also thank Jessica Scheider of Frankfurt for confirming the Mongolian information.

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### 8. MAMMALIAN PREY SPECIES OF THE FOREST OWLET

#### *HETEROGLAUX BLEWITTI* HUME

The Forest Owlet (*Heteroglaux blewitti*) is one of the least known endemic birds of India. It was considered to be extinct for 113 years until its rediscovery in Toranmal Reserve Forest in Maharashtra (King and Rasmussen 1998). Little has been published on the diet of the Forest Owlet (Rasmussen and Ishtiaq 1999; Ishtiaq *et al.* 2002). Earlier studies on the foraging ecology of the Forest Owlet reveal that its food consists of 58.8% skink and other lizards, 15.8% field mice and rats, 2.3% birds, 1.8% grasshoppers, 0.6% caterpillars, 0.6% frogs and 20.5% unidentified prey item (Ishtiaq *et al.* 2002). However, according to the pellet analysis by Jathar and Rahmani (2002), insects is the main diet of the Forest Owlet (41%) followed by mammals (36%), reptiles (16%) and remaining (7%) comprised of birds, arachnids and amphibians. Information on mammalian prey species of the Forest Owlet is anecdotal. The primary aim of this note is to describe mammalian prey species of the Forest Owlet.

The study was conducted in Toranmal Reserve Forest of Shahada *taluk*, in Nandurbar district, Maharashtra, India. The study area lies between 21° 47' N and 74° 28' E to 21° 49' N and 74° 29' E, at an altitude of 450 m to 550 m. Toranmal lies in the Akrani hills of west Satpura mountain ranges.

The Forest Owlet is found in open wooded habitat near stream beds dominated by Teak and other tree species such as *Boswellia serrata*, *Anogeissus latifolia*, *Lanea grandis*, *Lagerstroemia parvifolia* interspersed with low lying bushes and grass.

Pellets were collected regularly from four pairs at four different locations for seventeen months (November 2001 to June 2003). The location coordinates, altitude and numbers of pellets were recorded. All the pellets were collected from a diurnal roost of Forest Owlet. Efforts were made to collect a large number of pellets and care was taken to avoid collection of pellets of other owl species. All pellets were sun-dried, numbered and kept in polythene bags, with collection data.

The pellets were dissected using standard techniques (Yalden and Morris 1990). The material was segregated according to class: arachnids, insects, amphibians, reptiles, birds and mammals. Prey items were identified to the finest possible taxonomic level at the Zoological Survey of India, Pune by the second and third author. Jawbone and skull pieces showing key characters like molars, incisors, nasals, pallet, mandibles were used for identifying mammals up to species level, using Corbet and Hill (1992) and Agrawal (2000).

MISCELLANEOUS NOTES

**Table 1:** Percentage occurrence and biomass of the mammalian prey species of the Forest Owlet found in pellets (n= 193)

Species	No. of individuals (a)	Frequency of occurrence	Total frequency	Mean weight of animal (in grams) * (b)	Total Biomass of the animal (in grams) (a x b)	Percentage of Biomass	Total biomass
<b>Insectivores</b>							
<i>Suncus</i> spp.	7	3.63	17.10	-	-	-	37.23
<i>Suncus stoliczkanus</i>	10	5.18		5	50	6.18	
<i>Suncus etruscus</i>	9	4.66		10	90	11.13	
<i>Suncus murinus</i>	7	3.63		23	161	19.92	
<b>Rodents</b>							
<i>Mus</i> spp.	89	46.11	59.06	-	-	-	62.71
<i>Mus booduga</i>	9	4.66		10	90	11.13	
<i>Mus musculus</i>	4	2.07		17	68	8.41	
<i>Mus phillipsi</i>	4	2.07		17	68	8.41	
<i>Mus saxicola</i>	3	1.55		26	78	9.65	
<i>Mus platythrix</i>	1	0.52		26	26	3.21	
<i>Tatera indica</i>	1	0.52		163	163	20.17	
<i>Vandeleuria oleracea</i>	1	0.52	14	14	1.73		
<i>Rattus</i> sp.	2	1.04	-	-	-	-	
Unidentified	46	23.83	23.83	-	-	-	
<b>Total</b>	<b>193</b>			<b>311</b>	<b>808</b>		

\* Weights of all insectivores were taken from BNHS collection records and weights of all rodents were taken from Ellerman (1961)

Analysis of the 371 pellets revealed a diet comprising 574 prey items of which 193 were small mammals. Thus, mammals accounted for 33.62% of the prey. Altogether eight species of rodents (mice and rat) and three species of insectivores (shrews) were recorded from the pellets. 89 samples of mice *Mus* could not be identified up to species level and 46 samples were not identified due to lack of jawbones and skulls.

**Prey frequency and prey biomass**

*Mus* spp. were the most frequent prey of the Forest Owlet during the study period. *Suncus stoliczkanus* was the second most frequent prey followed by *Mus booduga* and *Suncus etruscus* (Table 1).

Though relative abundance of prey species within the Forest Owlets territory was not estimated, it appears that small mammals especially *Mus* spp. were hunted in proportion to their relative abundance. Studies on the Barn Owl *Tyto alba* (Evans and Emlen 1974) have shown that the change in consumption of prey is related to the periodic change in the population of the prey species. The relationship between rainfall and population increase in rodents and their relative consumption by Barn Owls has been shown by Debrot *et. al.* 2001.

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### 9. SIGHTING OF LONG-EARED OWL (*ASIO OTUS*) IN BANNI REGION OF KACHCHH DISTRICT, GUJARAT, INDIA

The Long-eared Owl *Asio otus* is an uncommon winter visitor to India (Kazmierczak and Singh 1998). On January 17, 2000, we were surveying in the Andaui village of Banni region of Kachchh, Gujarat, close to the Greater Rann, for rare and endangered plants. Standing on a dry village pond, one of us (JJ) saw something that resembled a dead stump of a branch among the foliage of one of the *Acacia nilotica* trees. On a closer look, we found it to be a bird, and that too an owl.

The owl was brownish orange in colour, with heavy streaks on the breast, belly and flanks, and to some extent on the upper parts. It had long ear tufts with an orange brown facial disc and orangish brown eyes.

On scanning the other trees nearby, we spotted three more birds. They were perched on branches close to the main trunk. The average height of the trees was 3 m. The birds were perched between 1 m to 2.5 m from the ground, with dense cover on all sides. The canopy was very dense, as the branches of the trees had grown after the villagers had lopped them. These have probably given them adequate protection and cover from disturbance, especially from crows. We could approach the edge of the canopy (< 2m) without disturbing the birds.

The Long-eared Owl is listed in Appendix A in THE BIRDS OF KUTCH (Ali 1945). Ali has mentioned that sightings of this bird were reported from Kutch by Dr. F. Stoliczka and A.O. Hume in the early 1870s, but the species was not spotted

during his survey.

This species has been reported to be a resident migrant, breeding in Baluchistan and Kashmir up to c. 2000 m and wintering in Pakistan and N. India (Ali and Ripley 1995). Grimmett *et al.* (1999) call the species a winter visitor to Pakistan and northwest India, also with records of breeding.

It was said to occur in the hilly forest in summer and grassy low-land jungle (Ali and Ripley 1995) and among stunted trees and popular plantations (Grimmett *et al.* 1999) in winter. Our sighting was in a small patch of *A. nilotica* forest, which had been severely topped, but had grown again into a thick closed canopy, located at the edge of the Rann in the once extensive Banni grasslands.

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